

REMARKS

Claims 11, 16, 21, 26, 31, 36, 41, 46, 51, and 56 have been amended. New Claims 66-70 have been added. Support for the amended claims and the new claims may be found at least between lines 10 and 22 on page 2 and between lines 1-5 on page 18 of the Patent Application. No new matter has been added. Claims 11-70 are pending in the present application.

In the Office Action, the Examiner indicated that claims 61-65 are allowed.

In the Office Action, the Examiner rejected claims 11-60 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement. Pursuant to the amendments indicated herein, Applicants respectfully submit that the pending claims no longer set forth "a chemical toxin." Applicants therefore respectfully request that the Examiner's rejections of claims 11-60 under 35 U.S.C. 112, first paragraph, be withdrawn.

In the Office Action, the Examiner rejected claims 1, 4, 6, 9, 11, 14, 16, 19, 21, 24, 26, 29, 41, 44, 46, and 49 under 35 U.S.C. 102(b) or 103(a) as being anticipated by or, in the alternative, obvious over, Chalamala, et al, "Effect of CH₄ on the Electron Emission Characteristics of Active Molybdenum Field Emitter Arrays," J. Vac. Sci. Tech. vol. 16(6), pgs. 307-376, 1998, hereinafter referred to as the first Chalamala publication in view of Chalamala, et al, "Interaction of H₂O with Active Spindt-Type Molybdenum Field Emitter Arrays," J. Vac. Sci. Tech. vol. 17, pgs. 303-305, 1999, hereinafter referred to as the second Chalamala publication. The Examiner rejected claims 11, 14-16, and 19-20 under 35 U.S.C. 102(b) as being anticipated by Chalamala, et al, "Effect of O₂ on the Electronic Emission Characteristics of Active Molybdenum Field Emission Cathode Arrays," J. Vac. Sci. Tech. B vol. 16, pgs. 2859-2865, 1998, hereinafter referred to as the third Chalamala publication. The Examiner rejected claims 12-13, 17-18, 22-23, 25, 27-28, 30-40, 42-43, 45, 47-48, and 51-60 under 35 U.S.C. 103(a) as

being unpatentable over either the first Chalamala publication or the second or third Chalamala publications and in view of admitted prior art. The Examiner's rejections are respectfully traversed.

Pursuant to the amendments indicated herein, the independent claims variously set forth techniques that may be used to render pathogens and/or toxins harmless. Embodiments of these techniques include reacting, ionizing, or dissociating one or more toxins using a field emitter array. The Merriam Webster Online Dictionary defines a toxin as "a poisonous substance that is a specific product of the metabolic activities of a living organism and is usually very unstable, notably toxic when introduced into the tissues, and typically capable of inducing antibody formation." Exemplary toxins include Sarin and Soman. In the Office Action, the Examiner has acknowledged that molybdenum and methane are not toxins. See Final Office Action, item 10, pages 7-8. Furthermore, the Examiner has provided no reason why persons of ordinary skill in the art would be motivated to modify the cited references to arrive at the claimed invention.

For at least the aforementioned reasons, Applicants respectfully submit that the pending claims are not anticipated by or obvious over the cited references. Applicants respectfully request that the Examiner's rejections of claims 11-60 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) be withdrawn.

New claims 66-70 specifically set forth, among other things, exposing the low-power field emitter array (FEA) to at least one gas comprising at least one of a pathogen and a toxin. New claims 66-70 also set forth rendering the pathogen and/or the toxin harmless in response to exposure of the pathogen and/or the toxin to the low-power field emitter array (FEA). As acknowledged by the Examiner, the prior art of record fails to teach or suggest exposing one or more toxins to a field emitter array. Applicants further submit that the prior art of record fails to

teach or suggest exposing one or more pathogens to a field emitter array to render the pathogen harmless. For at least the aforementioned reasons, Applicants respectfully submit that new claims 66-70 are in condition for allowance.

The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,
WILLIAMS, MORGAN & AMERSON, P.C.
CUSTOMER NO. 23720

Date: June 4, 2007

/Mark W. Sincell/
Mark W. Sincell, Ph.D.
Reg. No. 52,226
10333 Richmond, Suite 1100
Houston, Texas 77042
(713) 934-7000
(713) 934-7011 (fax)

AGENT FOR APPLICANTS